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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/158,549	09/22/1998	JOHN S. HENDRICKS	5515	4086

7590

07/31/2003

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EXAMINER

BROWN, RUEBEN M

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 07/31/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

5/14

Office Action Summary

Application No.

09/158,549

Applicant(s)

HENDRICKS ET AL.

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/20/2003 have been fully considered but they are not persuasive. With respect to claim 1, applicant argues on page 10, that the combination of Florin & Handelman, do not teach the features recited in the instant claim. Examiner respectfully disagrees. First of all, Handelman clearly teaches that e-mail data may be transferred to external memory unit 38 for storage; col. 6, lines 23-41 & col. 5, lines 42-45. Examiner asserts that processing is broad enough to read on storing and retrieving e-mail data from external memory unit 38. The claimed interface reads on the connection between the external memory unit 36 and the CATV converter 18.

Claim 1 goes on to recite, "a memory for storing programming instructions" and "at least one microprocessor connected to the memory and the interface for accessing the stored interactive programming instructions to produce e-mail based on the stored interactive programming instructions". Clearly, Handelman discusses that the CATV converter unit 18 is an interactive system, since the user is enabled to at least interactively select faxes, e-mails and programming, (col. 3, lines 1-7). Therefore since the CATV converter unit 18 is a computer driven system, there is necessarily programming instructions for controlling the various interactive operations stored in memory. The CATV converter unit could not operate without

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them, even though it is not explicitly disclosed where these interactive programming instructions are located.

Furthermore, Handelman discusses that the e-mail data is transmitted/received by various components of CATV unit 18, under control of the processor 34 or 156, therefore processor 34 and 156 read on the operation of a microprocessor; see col. 6, lines 22-50; col. 8, lines 34-67.

Moreover, Florin explicitly discloses a CPU 63 and system memory 65, which stores program instructions for operating the system, which reads on the claimed subject matter; see Fig. 2; col. 8, lines 50-55 & col. 10, lines 1-15).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 16-21 & 27-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florin, (U.S. Pat # 5,621,46), in view of Handelman, (U.S. Pat # 5,715,315).

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Considering claim 1, the claimed hardware upgrade for enhancing the functionality of a set top box STB in a TV delivery system, such that each STB has a mailbox for receiving e-mail, Florin discloses an interactive CATV system that enables a subscriber to transmit/receive e-mail services at a audio-visual transceiver 54, i.e. STB, see Florin col. 22, lines 20-30. As for the step comprising an interface for providing an electrical connection to the STB, whereby the e-mail is transferred from the STB for processing and the processed e-mail is passed to the STB for display, Florin does not discuss any details of the processing of the e-mail services.

However, the disclosure of Handelman teaches that e-mail data may be transmitted from the CATV interface unit 18 to an external memory unit 38, (Fig. 2; col. 6, lines 24-26). E-mail data then may be retrieved from external memory unit 38 passed through the STB and displayed on the TV receiver, col. 6, lines 38-45. It would have been obvious for one ordinary skill in the art at the time the invention was made to modify Florin with the teachings of Handelman, at least for the desirable advantage of making more memory available through the external memory unit.

The claimed memory for storing interactive programming instructions reads on Florin, col. 8, lines 52-55 and is necessarily included in Handelman, which is directed to a CATV system that enables subscribers interactivity, (col. 1, lines 25-30; col. 5, lines 40-45 & col. 9, lines 15-25). Moreover, Handelman discloses that the processor 34 controls the operation of the STB/CATV interface unit 18; see col. 6, lines 34-36.

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Also the claimed at least one microprocessor connected to the memory and connected to the interface for accessing the stored interactive programming and for processing the e-mail to produce processed e-mail based on the stored interactive programming instructions reads on the operation of the CPU 63 in Florin and the processor 34 and processor 156 of Handelman; see col. 6, lines 34-36 & col. 8, lines 38-67.

Considering claims 2, 17, 28, 32 & 37, Handelman discloses that video data may be transmitted to the CATV unit 18 in MPEG format, which reads on digital video; see col. 6, lines 15-21. Also Florin discusses the use of digital video at col. 9, lines 35-40.

Considering claims 3 & 18, since the two known methods for data transmission are serial or parallel, Handelman utilizes either technique to transmit the data between the CATV unit 18 and external memory unit 38.

Considering claims 4 & 19, the instant claim calls for subscriber input, including textual information that is used to produce the processed e-mail for display. Florin & Handelman discuss that a remote control is used to select an information display channel or non-CATV data display option. Moreover, Handelman teaches that the STB may be connected to a keyboard, thereby enabling the input of textual information.

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Considering claims 5, 20, 30, 33-35 & 38-40, Florin (col. 11, lines 29-40; col. 23, lines 60-66; col. 24, lines 11-65) & Handelman (col. 1, lines 61-67) disclose interfacing with on-line databases, interactive services and message services and using a telephone modem. Thus the two-way communication reads on the user communicating with an intermediate CATV headend or more central facility.

Considering claims 6 & 21, the claimed memory for storing the processed e-mail is met by the external memory unit 38 or internal memory unit 36 of Handelman; see Fig. 2, whereas Florin discusses the well-known utilization of a CPU 63 for controlling the set top box.

Considering claims 16, 31 & 36, the claimed method for enhancing the functionality of a STB comprises steps that correspond with subject matter mentioned above in the rejection of claim 1, and is likewise treated. As for the additional features recited in claim 36, all subject matter is necessarily included in Handelman.

Considering claim 27, the claimed method steps of providing e-mail service to subscribers corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise treated. Claim 27 includes the additional limitation of the menu control information being generated at an operations center and transmitted to the cable headend before transmission to the subscriber. Official Notice is taken that at the time the invention was made, it was known in the art to utilize intermediate CATV stations. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate the combination of Florin &

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Handelman in a manner wherein data generated at a central location and transmitted to an intermediate CATV headend, before transmission to the subscriber, at least for the purpose of dispersing the data to a wider range of subscribers, other than those on the range of a particular intermediate CATV headend.

Considering claim 29, the operation of the headend in Handelman reads on the recited subject matter.

4. Claims 7-10, 12-14 & 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman, (U.S. Pat # 5,003,591), in view of Strubbe, (U.S. Pat # 5,223,924).

Considering claim 7, the amended claimed advanced STB for use with a TV program delivery system comprising memory for storing menu content information reads on Kauffman, (Abstract; col. 8, lines 31-33). Kauffman teaches that firmware that implements on-screen displays that includes menu information, may be downloaded and stored in memory at the user's CATV converter.

Kauffman also meets the additionally amended claimed feature of the terminal being capable of operating with an interactive e-mail service conducted from a cable headend, col. 8, lines 25-33.

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As for the claimed receiver for receiving digitally compressed program signals and a control information stream, wherein the control information stream comprises a description of the contents of the program signals received with the control information stream, Kauffman teaches that the CATV converter receives programs signals in fixed length segment format, but does not explicitly state that they are received using digital compression, as recited in the claim. Nevertheless, Strubbe discloses transmission of program signals (such as TV program information) as digital transmission, col. 1, lines 45-65 & col. 2, lines 50-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Kauffman with the teachings of Strubbe, transmitting program signals as compressed digital data, at least for the well-known advantage of more efficient transmission of more data.

Furthermore, since Strubbe (col. 2, lines 50-67) teaches that the program signals (i.e., program material) may be transmitted in MPEG, along with data describing the program signals, (i.e., program material), the claimed feature of a control information stream comprising a description of contents of the program signals is also met by the reference.

The claimed signal processor connected to the memory and receiver for processing the control information stream to produce processed control information, such that the processed control information is used to update the stored menu content information, producing updated menu content information is met by the on-screen display driver 72 of Kauffman (col. 8, lines 19-33) & the processor 35 of Strubbe, (col. 4, lines 1-25).

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The claimed generator connected to the memory for generating messages and menu displays using updated menu content information, such that the displays produce subscriber options for selection of other menu options and TV programs also reads on the on-screen display driver 72 of Kauffman (col. 8, lines 19-33) & the processor 35 of Strubbe, (col. 4, lines 1-25).

The claimed subscriber interface in communication with the generator for selecting messages, menus, TV programs or for entry of subscriber inputs is met by the keyboard 68 of Kauffman, (col. 8, lines 7-13).

As for the claimed tuner for tuning to one of the digitally compressed signals to produce a TV program, the combination of Kauffman, (col. 6, lines 43-60) and Strubbe, (col. 3, lines 44-50) reads on the claimed feature.

The further amended claimed feature of memory for storing the interactive programming instructions and at least one processor connected to the memory for accessing the stored interactive instructions & for executing the stored interactive programming instructions to produce interactive signals that include e-mail, reads on the operation of the microprocessor 50 in Kauffman, see (col. 7, lines 5-25 & col. 8, lines 25-33).

Considering claims 8, 13 & 23, Strubbe teaches that programs signals may be transmitted in MPEG format, which reads on digital video.

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Considering claims 9 & 24, the second processor for processing the TV programs is broad enough to read on the descrambler 70 of Kauffman, (col. 8, lines 12-19) & the PIP circuit 30 of Strubbe.

Considering claims 10 & 25, Kauffman teaches that the subscriber is enabled to send e-mail messages, which reads on the claimed subject matter, col. 8, lines 26-31.

Considering claim 12, the claimed system to provide subscriber e-mail services with a remotely located computer system using a series of individual menus corresponds with subject matter mentioned above in the rejection of claim 7, and is likewise treated. As for the additionally claimed operations center generating menu control information in digitally compressed form, transmitting the menu control information and cable headend for receiving and transmitting menu control information to at least one terminal, the claimed feature is met by the combination of Kauffman & Strubbe.

Kauffman teaches that firmware, which may include menu control information may be created at a Firmware Development System 16, which may or may not be located at the CATV headend, col. 5, lines 8-25. As pointed out in the rejection of claim 7, Strubbe teaches transmission of the data to subscribers in a digitally compressed format.

Considering claim 14, the cable headend of Kauffman necessary includes a controller for controlling e0mail services.

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Considering claim 22, the claimed method for using an advanced STB with a TV delivery system, comprises steps that correspond with subject matter mentioned above in the rejection of claims 7, and is likewise treated.

5. Claims 11, 15 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman & Strubbe, in view of Remillard, (U.S. Pat # 5,561,709).

Considering claims 11 & 15, Kauffman teaches receiving e-mail service but does not disclose the use of a telephone modem for accessing additional networks. However, Remillard teaches using a modem to access a variety of services for a subscriber, including e-mail service; see col. 4, lines 40-55 & col. 6, lines 15-65. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Kauffman with the known feature of a modem, for the desirable benefit of providing the subscriber with a wider range of services, as taught by Remillard, (col. 1, lines 54-67).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Wachob Teaches transmission of video data in video format.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

(703) 872-9314 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")


*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399.
The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the
organization where this application or proceeding is assigned is (703) 872-9314 for regular
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown


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